Carleton University
School of Computer Science
COMP 3005
Database Management Systems
Fall 2022

Instructors:

Ahmed El-Roby
ahmed.elroby@carleton.ca
HP 5433

Abdelghny Orogat
abdelghnyorogat@cmail.carleton.ca

Lectures: Monday and Wednesday: 1:05PM - 2:25PM

Office Hours: Monday: 11:00 AM - 12:00 PM
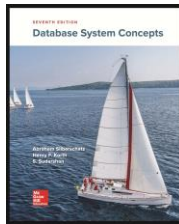
Teaching Assistants:
1. Mya Banwait: MYABANWAIT@cmail.carleton.ca
2. Yingjun Dai: yingjundai@cmail.carleton.ca
3. Ozgun Ozan Kilic: OzKilic@cmail.carleton.ca
4. Shreya Patel: SHREYAPATEL4@cmail.carleton.ca
5. Mohammad Bin Yousuf: MOHAMMADYOUSUF@cmail.carleton.ca
   TA office hours start on the week of September 19th. Office hours dates and times can be found on Brightspace.

Textbook:
1. Avi Silberschatz, Henry F. Korth, and S. Sudarshan. Database System Concepts. Seventh Edition. McGraw-Hill. ISBN 9781260084504.

Prerequisites:

[COMP 1805](#) with a minimum grade of C-, and either [COMP 2402](#) or ([SYSC 2004](#) and [SYSC 2100](#)).

Course Description:

Introduces students to concepts of database management systems, data models, database languages, database design and physical data organization. Materials:

- Overview of Databases
- Relational Model
- SQL
- Relational Database Design
- Physical Storage Systems and Storage Structure
- Indexing
- Query Processing and Query Optimization

Attendance

Class attendance is important, as you will be responsible for all subjects discussed in class. No attendance will be taken.

Marking Scheme:

Assignments (Total of 5)	25±5%
Projects	25±5%
Midterm (Oct. 19th in class)	25±5%
Final (Centrally Scheduled)	25±5%

Note：

1. Collaborating on assignments is strictly disallowed. If found, all students involved will be given a mark of 0 and the case will be reported to the office of the Dean of Science. If you need help, please see a TA or the instructor during their office hours.
2. Posting assignment solutions on discussion boards before the due date and time is prohibited and the student involved will be given a mark of 0 for the assignment. Assignments must be submitted to *Brightspace* in order to be marked. Assignments are allowed to be submitted one day late with 10% penalty. After one day, no submission will be accepted. Never email any assignment to me or TAs! Technical problems do not exempt you from this requirement, so if you wait until the last minute and then have issues with your connection, you will still receive a mark of zero. Consequently, you are advised to:

    • Periodically upload your progress (e.g., upload your progress at least daily).
    • Attempt to submit your final submission at least one hour in advance of the due date and time.

3. The four assignments with highest grades will count towards the 25% of the total grade for the course.

4. Any issues regarding assignment and midterm marks should be brought to the attention of the TA who marked it (only if the TA does not address the problem to your satisfaction should you bring the matter to the instructor). This should be done *no later than one week* after the marks of this assignment/midterm are posted. After this time, no remarking will be done.
5. Must pass the exams with at least 45% to pass the course.

Resources

In case you need to use computing resources, you can openstack instances can be provided: https://carleton.ca/scs/tech-support/scs-open-stack/

Undergraduate Academic Advisor

The Undergraduate Advisor for the School of Computer Science is available in Room 5302C HP; or by email at scs.ug.advisor@cunet.carleton.ca. The undergraduate advisors can assist with information about prerequisites and preclusions, course substitutions/equivalencies, understanding your academic audit and the remaining requirements for graduation. The undergraduate advisors will also refer students to appropriate resources such as the Science Student Success Centre, Learning Support Services and Writing Tutorial Services.

University Policies

For information about Carleton's academic year, including registration and withdrawal dates, see Carleton's Academic Calendar.

Pregnancy Obligation. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit Equity Services.

Religious Obligation. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit Equity Services.

Academic Accommodations for Students with Disabilities If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as soon as possible to ensure accommodation arrangements are made. For more details, visit the Paul Menton Centre website.

Survivors of Sexual Violence. As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and

to obtain information about sexual violence and/or support, visit: carleton.ca/sexual-violence-support

Accommodation for Student Activities. Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, see the policy. Since the beginning of the COVID-19 pandemic, Carleton has temporarily suspended the need for doctor's notes or medical certificates for academic accommodation requests related to COVID-19. This decision was made in recognition of the fact that alternate course delivery and assessment methods present unique challenges and that it continues to be more difficult than usual for students to see a doctor and obtain documentation.

As we all continue to navigate ongoing disruptions caused by the public health crisis, we are **extending this process for the Fall 2022 Term**.

In place of a doctor's note or medical certificate, students will be advised to complete the self-declaration form available on the Registrar's Office website to request academic accommodation for missed course work including exams and assignments. Students will also be encouraged to connect directly with their instructors to discuss required accommodations arising from the COVID-19 situation.

Student Academic Integrity Policy. Every student should be familiar with the Carleton University student academic integrity policy. A student found in violation of academic integrity standards may be awarded penalties which range from a reprimand to receiving a grade of *F* in the course or even being expelled from the program or University. Examples of punishable offences include: plagiarism and unauthorized co-operation or collaboration. Information on this policy may be found here.

Plagiarism. As defined by Senate, "plagiarism is presenting, whether intentional or not, the ideas, expression of ideas or work of others as one's own". Such reported offences will be reviewed by the office of the Dean of Science. Standard penalty guidelines can be found here.

Unauthorized Co-operation or Collaboration. Senate policy states that "to ensure fairness and equity in assessment of term work, students shall not co-operate or collaborate in the completion of an academic assignment, in whole or in part, when the instructor has indicated that the assignment is to be completed on an individual basis". Please refer to the course outline statement or the instructor concerning this issue.

<u>Academic Integrity: Minimum penalties for offences starting 6 January 2020</u>

First offence, first-year students (< 4.0 cr): Final grade reduction of one full grade (e.g., A- becomes a B-, if that results in an F, so be it)
First offence (everyone else): F in the course

Second offence: One-year suspension from program
Third offence: Expulsion from the University
Note: these are minimum penalties. More-severe penalties will be applied in cases of egregious offences (e.g., a first-year student accessing CULearn from their phone during an exam will be given an F in the course; bribing a faculty member for a better grade would be grounds for suspension, etc.)

Special Information

It is important to remember that COVID is still present in Ottawa. The situation can change at any time and the risks of new variants and outbreaks are very real. There are number of actions you can take to lower your risk and the risk you pose to those around you including being vaccinated, wearing a mask, staying home when you're sick, washing your hands and maintaining proper respiratory and cough etiquette.

Feeling sick? Remaining vigilant and not attending work or school when sick or with symptoms is critically important. If you feel ill or exhibit COVID-19 symptoms do not come to class or campus. If you feel ill or exhibit symptoms while on campus or in class, please leave campus immediately. In all situations, you must follow Carleton's symptom reporting protocols.

Masks: Carleton has paused the COVID-19 Mask policy, but continues to strongly recommend masking when indoors, particularly if physical distancing cannot be maintained. It may become necessary to quickly reinstate the mask requirement if pandemic circumstances were to change.

Vaccines: While proof of vaccination is no longer required as of May 1 to attend campus or in-person activity, it may become necessary for the University to bring back proof of vaccination requirements on short notice if the situation and public health advice changes. Students are strongly encouraged to get a full course of vaccination, including booster doses as soon as they are eligible, and submit their booster dose information in cuScreen as soon as possible. Please note that Carleton cannot guarantee that it will be able to offer virtual or hybrid learning options for those who are unable to attend the campus.

All members of the Carleton community are required to follow requirements and guidelines regarding health and safety which may change from time to time. For the most recent information about Carleton's COVID-19 website and review the Frequently Asked Questions (FAQs). Should you have additional questions after reviewing, please contact covidinfo@carleton.ca.